

Application No. 09/746,914

### **REMARKS**

Reconsideration and reexamination of this application are respectfully requested. Claims 1-31 are pending in this application. Claim 1 has been amended.

Claims 1-31 were rejected under 35 USC 103(a) as being unpatentable over Mainwaring et al. (WO 99/19804) and Sato et al. (U.S. Patent No. 5,831,602) and further in view of Reese (U.S. Patent No. 6,236, 980). The Examiner acknowledges that neither Mainwaring nor Sato explicitly teach a group-based recommendation criteria and cite Reese for disclosing the same. Applicants respectfully disagree.

Claim 1, as it is presently amended, is directed to an electronic board system, comprising: an electronic board including a screen for displaying information items of interest in different areas of the screen; apparatus for sensing which areas of the screen are of current interest to users viewing the screen; an input device for receiving information items to be displayed on the electronic board from a plurality of users; a memory for storing information items received from the input device; and a processor for selecting which information items from the input device and the memory to display on the screen, for determining where and how to display the selected information items on the screen and for displaying the selected information items in the different areas on the screen; wherein the processor dynamically selects which information items to display on the screen in accordance with a predetermined relationship based on group-based recommendation criteria, wherein group-based recommendation criteria comprise preferences of a group of users such that the processor displays information that is likely to be at least of interest to several members of a group, and reactively selects which information items to display on the screen in accordance with sensed user interest as determined by the sensing apparatus, wherein, in response to user interest as determined by the sensing apparatus, the processor displays more items on the screen that are similar to items in the sensed areas at the expense of items in areas in which there is less user interest.

1. Reese does not teach or disclose the use of group-based recommendation criteria.

There is no mention in Reese of a system which employs group-based

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recommendations or the use of group-based recommendations. Reese teaches a computer-based system in the financial investment field, specifically a reporting structure that aids in the decision making on a single security or single element at a time or decision making hierarchy of recommendation sources for securities. In the system of Reese, a user selects a single item of interest to the user, which is typically a stock or other investment opportunity. The system of Reese then displays a report which summarizes investment recommendations for that single item. A group-based recommendation system operates differently.

Unlike most recommendation systems which learn the preferences of individual users, the recommendation engine of a group-based recommendation system deals with the preferences of a group of users and displays information that is likely to be of general interest or at least of interest to several members of a group. Implicit ratings (such as from user actions) and explicit ratings (such as from user comments and ratings) may be used by the recommendation engine. The recommendation criteria may also use additional information from a group calendar to decide who is likely to see the display on a given day and thereby further refine the choice of information to display. For example, if it is known from the calendar that a given person will not be at work on a particular day then the preferences of that person can be ignored when selecting content for display.

In a group-based recommendation system, items are displayed based on the preferences of the defined group. For example, in a group-based recommendation system in which the group were interested in stocks, the system would display a list of stocks of interest to the group. Displaying a list of investment recommendations for a single stock of interest to a single user, as taught by Reese, is not the same as displaying a list of stocks (i.e., several stocks) of interest to a particular group. Displaying a list of investment recommendations for a single stock, as taught by Reese, is not the same as displaying a list of stocks, the list being determined by group-based recommendation criteria.

For example, if a user walked up to Applicants' electronic board system and the sensors indicated that the user was interested in a particular energy stock displayed

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on the board at some location, the system would use the group-based recommendation criteria to display other energy stocks of interest to at least some members in the group in that area. These other energy stocks would be displayed on the screen in the sensed area would be at the expense of items in areas in which there is less user interest.

2. Sato et al. does not teach an electronic board system which reactively selects which information items to display on the screen in accordance with sensed user interest as determined by the sensing apparatus which, in response to user interest as determined by the sensing apparatus.

Sato et al. is concerned with the problem of the contrast and brightness of the display in relation to the distance from viewers, not placement of items of interest to viewers. If the contrast or brightness of the display device of the electronic board is set in consideration of viewers (audience), the contrast and brightness are sometimes too high for a presenter who inputs characters and figures on the electronic board (col. 1, lines 42-45). Sensors in Sato et al. detect the area on the electronic board display where the presenter is pointing and a controller causes the contrast or brightness in a region around the area to change for a short period of time. Regular contrast or brightness is set for the audience in the rest of the display. Sato et al. changes the contrast or brightness of the input area (where a presenter is located) so as to reduce the uncomfortable feeling given to the presenter (col. 4, lines 16-17).

3. Changing the contrast of items on a screen in based on a user's interest as taught by Sato is not the same as changing the size of the area for content to be displayed based on sensed user interest.

As best can be determined, Sato et al. does not teach or suggest changing the size of the input area; Sato et al. only changes the contrast or brightness of the input area. Content of the input area in Sato et al. appears to be unchanged. In Applicants' electronic board system, the size of the areas for content to be displayed changes in response to user interest. The electronic board system as claimed in Claim 1 is reactive in that it sense the areas of the screen that users are currently interested in and devotes more display space to those areas at the expense of areas in which there

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is less interest. For example, if the electronic board system display has three main areas: one area devoted to social activities, another area devoted to movie reviews and another area devoted to music reviews, and the sensing apparatus senses that a group of users is interested in music reviews, the electronic board system will readjust the display areas so that more area (and hence more items) is devoted to music reviews and less area (and hence fewer items) is devoted to social activities and movie reviews.

Claims 1-31 are believed to be patentable over Mainwaring et al. in view of Sato et al. and further in view of Reese.

Reconsideration of this application and allowance thereof are earnestly solicited. In the event the Examiner considers a personal contact advantageous to the disposition of this case, the Examiner is requested to call the undersigned Attorney for Applicants, Jeannette M. Walder.

Respectfully submitted,



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